

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

IN RE GOOGLE PLAY STORE  
ANTITRUST LITIGATION

MDL Case No. [21-md-02981-JD](#)

Member Case Nos. 20-cv-05761-JD,  
21-cv-05227-JD

**ORDER RE DR. SINGER'S PROPOSED  
EXPERT TESTIMONY**

The Court held a concurrent expert evidence proceeding on August 1, 2023, for defendants' motion to exclude the merits opinions of Dr. Hal Singer, an economist offered by the Consumer and State plaintiffs. *See* MDL Dkt. Nos. 487, 556. Dr. Singer and Dr. Gregory Leonard, an economist offered by defendants, are directed to answer these follow-up questions under oath.

**Background**

Dr. Singer uses a logit model of one minus an app's share of its Play Store category to calculate the app's pass-through rate of Google's service fee for use of the Play Store. Dr. Singer appears to agree that the logit model assumes that the products in issue are substitutes in proportion to their shares (the IIA assumption). *See* MDL Dkt. No. 487 at 7-8; MDL Dkt. No. 508 at 6. Dr. Leonard challenges the use of the logit model as unreliable because the apps in the Play Store categories are too diverse to be substitutes in proportion to their shares. Dr. Singer says that he "applied standard econometric methods (regression analysis) to Google's voluminous transactional data to confirm the logit applies in this case." MDL Dkt. No. 540-2 at 11. Dr. Singer also says that "even when IIA is not strictly satisfied," the logit model can "still be a reliable approximation of pass through." *Id.* at 12.

Questions

A. What economic literature states that a regression analysis is a reliable way of (i) testing for the IIA assumption in the logit model, or (ii) confirming that a logit model can be used to reliably measure the relevant demand curve here?

B. To what extent can IIA be “not strictly satisfied” before the use of logit model becomes unreliable? How can the Court know that this limit has not been crossed here? How close is the “approximation” that Dr. Singer posits, and how can the Court have confidence that his logit model has produced a sufficiently reliable approximation of pass-through here even if the apps in each category are not proportional substitutes for one another?

C. Is a per-unit pass-through rate necessarily greater than an *ad valorem* pass-through rate in this case? If so, why? Does this affect the reliability of Dr. Singer’s pass-through formula?

D. For the Play Points analysis, Dr. Singer used the example of AT&T in the 1980s as a benchmark for modeling the but-for world, positing that Google’s market share would likely decline to 60% with competition, just as AT&T’s did decades ago. Is the AT&T case an example of a two-sided market like the Google Play Store? Does that matter for its appropriateness for use as a benchmark here?

These questions will be answered in sworn declarations by Dr. Singer and Dr. Leonard. The substantive answers must be prepared by the experts themselves, and not by counsel. The responsive declarations must be filed by counsel on the ECF docket by August 14, 2023.

**IT IS SO ORDERED.**

Dated: August 6, 2023




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JAMES DONATO  
United States District Judge